

EXHIBIT 2



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VIA EMAIL

Cecil E. Key
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**Re: *Corrino Holdings LLC v. Expedia, Inc. et al*
6:20-cv-00309-ADA (W.D.Tex.)**

Counsel:

We write on behalf of Defendants Expedia, Inc. and trivago N.V. (“Defendants”) to address Corrino Holdings LLC’s (“Corrino”) forthcoming infringement contentions. We have reviewed Corrino infringement contentions served upon Expedia Group, Inc. on July 9, 2020 and find them to be deficient.

As this case resumes, we expect that Corrino’s initial infringement contentions against Expedia, Inc. and trivago N.V. will correct the below-identified deficiencies.

Ex. A - U.S. Pat. No. 6,741,188

Charts Limited to Mobile Applications

As a threshold matter, Corrino asserts the 188 Patent against the “websites *and mobile apps*” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo. However, the functionality charted by Corrino is limited to the mobile applications. *See e.g.*, Ex. A, Page 2-4 (“Screenshots taken from Android Device”). Corrino cites statements from the websites – such the privacy policies – about what data is collected; however, only the mobile applications’ functionality is charted.

If Corrino seeks to accuse the websites in addition to the mobile devices, Corrino must supplement its contentions to chart the websites’ functionality as well. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted



instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino's forthcoming initial infringement contentions.

Failure to Set Forth Where "Each Element" of the Asserted Claims is Found

Judge Albright's standing order requires Corrino to provide its contentions "in the form of a chart setting forth where in the asserted product(s) *each element* of the asserted claim(s) are found." Corrino's allegations are deficient insofar as they fail to set forth with any particularity where each element of the asserted claims of the 188 Patent is found in the accused products.

For example,¹ Corrino's infringement contention as to Claim 1 of the 188 Patent states that "each website contains hotel's location information such as city, country, postal code, etc. ('region identifier associated with a geographic region')." The claim requires each website to be "identified by a *region identifier* associated with a *geographic region*...wherein the region identifier is *embedded into the data* of the plurality of the websites."

What information, specifically, does Corrino allege is the "region identifier" associated with each website? How is that specifically-identified "region identifier" *associated with a geographic region* in each of the Accused Instrumentalities? Where in the data of the websites is the specific region identifier *embedded*, given patentee's arguments to the Patent Office? *See* Nov. 13, 2001 Reply to Office Action at 8-9 (distinguishing the Rosen prior art reference based on embedding of region identifier).

Similarly, claim 1 recites "a mobile communications system determining a user's location *and associated region identifier*..." Corrino's infringement contention states that the app "determines the user's location by using device GPS or cellular network" and then "links the user's current location *with the searched hotel's location* ('region identifier')." Corrino does not identify anything in the accused instrumentality that determines a *region identifier associated with the user's location*, as required by the claim.

Finally, although the 188 Contentions stated in a conclusory fashion that "[a]s the user location changes the identified hotels are also dynamically updated" this assertion is not supported by the screenshots pasted into the contention charts. As patentee explained to the Patent Office during prosecution of the 188 Patent, "dynamically updating" requires more than merely updating the current position for a subsequent query by a user or even automatically updating the search results based on change of location. As the patentee explained:

¹ The deficiencies herein are made by way of example only and are without limitation.

[W]hile Kari, *et al.*, discloses that information can be updated *automatically*, Kari *et al.* does not disclose that such information is updated *dynamically* as recited in the subject claim, wherein the term *dynamic* is defined as “characterized by continuous change, activity, or progress” by the 4th Edition of the American Heritage Dictionary...For instance, it is possible that information can be automatically updated every five minutes utilizing the invention of Kari *et al.* However, such automatic updating of information is not *dynamic* updating of information.

December 10, 2003 Reply to Office Action at 9 (emphasis in original).

Corrino’s claim chart does not support the conclusory assertion that the accused instrumentality dynamically updates search results, given the disclosure to the Patent Office regarding the meaning of that limitation.

Ex. B – U.S. Pat. No. 7,716,149

Limitation of Allegations to trivago Hotel Manager

Corrino states that “Exemplary infringing instrumentalities include the Trivago Hotel Manager *and all other substantially similar products.*” Similarly, Corrino identifies as Accused Instrumentalities: “Expedia Group’s property management tools *for each of the Expedia Group Brands and Subsidiaries*, for example the Trivago Hotel Manager application and all other substantially similar products and services.” The only charted instrumentality (and, indeed, the only specifically identified property management tool) is the trivago Hotel Manager.

If Corrino seeks to accuse property management tools in addition to the trivago Hotel Manager application, Corrino must supplement its contentions to identify and chart the functionality of these property management tools as well. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted trivago Hotel Manager application and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino’s forthcoming initial infringement contentions.

Failure to Plausibly Identify a “Persistent Virtual Environment”

Corrino’s infringement contentions state that the “persistent virtual environment” of Claim 1 is the Trivago Hotel Manager application itself. *See* Ex. B at Page 1 (“Trivago Hotel Manager (‘persistent virtual environment’) is a platform that enables a user to take control of his Hotel’s profile...”). Given the 149 Patent’s disclosure as to “persistent virtual environment,” there is no conceivable construction of the term in which the trivago Hotel Manager would satisfy this limitation.



Failure to Set Forth a Visualization that Represents a Social Aspect of the Alleged Persistent Virtual Environment

If as Corrino asserts, the trivago Hotel Manager application is the claimed “persistent virtual environment,” Corrino has not identified “a visualization that represents a social aspect of said persistent virtual environment” as required by Claim 1. As annotated on Page 4, Corrino maintains that the ability to “View the number of users redirected to your booking page from trivago” shows the “social aspect ... by number of viewers visiting the hotel website.” Even assuming *arguendo* that page views or redirects demonstrate a “social aspect” or “overall activity level,” this visualization does not show a social aspect of the Hotel Manager application itself (the claimed persistent virtual environment). Similarly, data on number of clicks on a static website does not show a social aspect of the Hotel Manager application itself.

Failure to Plausibly Identify One or More “On-Line Entities”

Corrino’s infringement contentions state that the “on-line entities” of Claim 2 are “viewers” that visited hotel websites. *See* Ex. B at Page 7. Given the 149 Patent’s disclosure as to “on-line entities,” there is no conceivable construction of the term in which viewers to the hotel website would satisfy this limitation.

Failure to Set Forth “Behavioral Information Related to At Least One Activity of ... On-Line Entities Within the Alleged Virtual Environment”

Corrino alleges that the Hotel Manager application is the “persistent virtual environment” of the 149 Patent. *See* Ex. B. at 1. However, in Claim 2 and 4, Corrino maintains that the “behavioral information” of on-line entities “within the alleged virtual environment” is data related to viewer clicks on the hotel websites. This activity is not within the alleged virtual environment (the Hotel Manager application) and cannot satisfy the claim, given the allegations with respect to the persistent virtual environment.

Ex. C – U.S. Pat. No. 7,843,332

Limitation of Allegations to Trivago Mobile App

Corrino purports to identify as accused instrumentalities the “websites and mobile apps” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo; however, the only mobile app charted is the trivago Mobile App and none of the websites are charted.

If Corrino seeks to accuse any applications other than the trivago application or any websites, Corrino must supplement its contentions to chart the functionality with specificity. If Corrino fails

to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino's forthcoming initial infringement contentions.

Failure to Set Forth a "Predefined Geographic Region"

Claim 1 of the 332 Patent provides that the list of one or more search results comprises "at least one search result *associated with a predefined geographic region*, wherein the geographic position of the communications device of the communication device indicated in the search query is within the *search distance of the predefined geographic region* associated with the at least one search result."

Corrino states that the "resultant hotels have their locations ('predefined geographic region') within the search distance mentioned in the filter." Merely stating that the hotel locations are within the search distance does not identify the "predefined geographic region" of the claims.

What, specifically, is the "predefined geographic region" of the claim? The hotel's state? City? Zip code? Address? Specific coordinates?

Moreover, Corrino's assertion that "resultant hotels have their locations within the search distance mentioned in the filter" makes it clear that the accused instrumentality does not practice the asserted claims of the 332 Patent. In its January 7, 2010 response to office action, the patentee distinguished the 332 patent from the Chan prior art reference as follows:

Chan's search results are "[o]nly the search results that are located in the searching area" Chan's "searching area" is based on the user's current location (or another defined location) and "searching area constraint" as (i) a "circulate area" centered about the user's current location, or (ii) "a zip code, ... a city, ... a state, ... [o]r ... any term to represent a government district where the user is currently located. Thus Chan's system does not disclose returning a search result that is "some distance" from any particular predefined geographic region. Instead, Chan returns "[o]nly the search results that are located" either (i) within a "circular area" centered about the user's current location, or (ii) within a zip code, city, state, etc. where the user is currently located. **As a result, [the claim's] "search results" are boarder than Chan's search results because Chan's system does not return any search results that are outside of Chan's defined "searching area."**

Jan. 7, 2010 Remarks Made in an Amendment at 14-15 (332 Patent File History) (emphasis added) (internal citations omitted).



The patentee disavowed claim scope in which “resultant hotels have their locations within the search distance mentioned in the filter.” *See* 332 Contentions. Corrino’s contentions with respect to the 332 demonstrate that the accused functionality does not satisfy this limitation.

Failure to Set Forth Full Contentions for Claim 8

Corrino purports to assert Claim 8 of the 332, which depends upon Claim 7. However, Corrino does not chart Claim 7 of the 332. As such, Defendants are not on notice as to where each element of the Claim 8 is alleged to be found in the accused instrumentality.

Failure to Set Forth a “Demographic Code”

Corrino fails to identify a “demographic code,” which is a limitation of Claim 8. Corrino’s charts merely state that a user’s previous internet history is collected, not that a “demographic code” is associated with the communications device as required by the claim.

Ex. D – U.S. Pat. No. 7,847,685

Limitation of Allegations to Trivago Mobile App

As with the 332 Patent, Corrino purports to identify as accused instrumentalities the “websites and mobile apps” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo; however, the only mobile app charted is the trivago Mobile App and none of the websites are charted.

If Corrino seeks to accuse any applications other than the trivago application or any websites, Corrino must supplement its contentions to chart the functionality with specificity. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino’s forthcoming initial infringement contentions.

Failure to Set Forth a “Location Code Corresponding to a Geographic Region”

Claim 1 of the 685 requires initiating the transmission of a list of one or more search results, wherein the list “comprises at least one search result that is associated with a *location code* corresponding to a *geographic region*.” Corrino’s infringement contentions equate the generic “locations” to the “geographic region” of the claim and “location information such as city name, address, etc.” as the “location code” of the claim. *See* Ex. D at Page 8.

Again, Corrino is hand-waving these key limitations. The claims require a “location code.” Simply stating that each hotel in the list of hotels “has its location information such as city name, address, etc.” does not put Defendants on notice as to Corrino’s contention as to what the claimed “location code” is. Similarly, what about the “locations” of the hotels does Corrino assert is the “geographic region” of the claim? The state? City? Zip code? Address? Specific coordinates?

Moreover, as with the 332 Patent discussed above, Corrino’s assertion that “resultant hotels have their locations within the search distance mentioned in the filter” makes it clear that the accused instrumentality does not practice the asserted claims of the 685 Patent. During prosecution of the 685 Patent, patentee distinguished the claims of the 685 Patent from Chan as follows:

Chan’s search results are “[o]nly the search results that are located in the searching area” Chan’s “searching area” is based on the user’s current location (or another defined location) and “searching area constraint” as (i) a “circulate area” centered about the user’s current location, or (ii) “a zip code, ... a city, ... a state, ... [o]r ... any term to represent a government district where the user is currently located. Thus Chan’s system does not disclose returning a search result that is “some distance” from any particular predefined geographic region. Instead, Chan returns “[o]nly the search results that are located” either (i) within a “circular area” centered about the user’s current location, or (ii) within a zip code, city, state, etc. where the user is currently located. **As a result, [the claim’s] “search results” are boarder than Chan’s search results because Chan’s system does not return any search results that are outside of Chan’s defined “searching area.”**

Jan. 7, 2010, Remarks Made in Amendment at 13-14 (685 Patent File History) (emphasis added) (internal citations omitted).

The patentee disavowed claim scope in which “resultant hotels have their locations within the search distance mentioned in the filter.” *See* 685 Contentions. Corrino’s contentions with respect to the 685 Patent demonstrate that the accused functionality does not satisfy this limitation.

Failure to Set Forth a “Demographic Code”

As with the 332, Corrino fails to identify a “demographic code,” which is a limitation of Claim 3 of the 685 Patent. Corrino’s charts merely state that a user’s previous internet history is collected, not that a “demographic code” is associated with the communications device as required by the claim. *See* Ex. D. at 10.

Ex. E – U.S. Pat. No. 7,958,104



Limitation of Allegations to Hotels.com App

Corrino purports to identify as accused instrumentalities the “websites and mobile apps” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo; however, Corrino has only charted the Hotels.com application and none of the websites.

To the extent that Corrino seeks to assert infringement of the 104 patent by applications other than the Hotels.com application or any of the websites, Corrino must supplement its contentions to chart the functionality with specificity. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino’s forthcoming initial infringement contentions.

Failure to Identify Each Claim Element With Specificity

The method of Claim 15 of the 104 requires processing the search request by “identifying a context chain related to the user device based on information passed with the search request, the context chain including a plurality of contexts.” Corrino cites generally to the Hotels.com privacy policy which states that Hotels.com collects device-specific information and uses it to tailor searches and show advertisements of interest. But Corrino’s contentions do not identify a “context chain” with specificity, instead referring to “for example the previous pages accessed, viewed, links clicked, etc.”

Similarly, Claim 15 requires that each in context in the plurality of context be a private context in which content is controlled by a publisher or a public context in which content is not controlled by a publisher. Corrino’s claim chart does not identify any public or private contexts and, indeed, does not use the words “public” or “private.”

Ex. F – U.S. Pat. No. 9,152,734

Limitation of Allegations to Expedia, Cheaptickets, and Travelocity Website

Corrino purports to identify as accused instrumentalities the “websites and mobile apps” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo; however, Corrino has only charted the Expedia, CheapTickets, and Travelocity websites.

The extent that Corrino seeks to accuse the Hotels.com, Orbitz, trivago, HomeAway or Vrbo websites or any of the Mobile Apps, Corrino must supplement its contentions to chart the functionality with specificity. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the

right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino's forthcoming initial infringement contentions.

Failure to Plausibly Identify "Story Content" or "Stories"

The 734 Patent is all about "story content" and "stories," limitations that appear throughout every limitation of the asserted claims of the 734 Patent. Corrino does not identify "story content" at all. *See* Ex. F at Claim 1 ("Expedia allows users to search flights ..." with no reference to "story content").

Similarly, Corrino does not identify any "story" with particularity, although the contentions seem to imply that any search result in an internet search constitutes a "story" for the purposes of the 734 Patent. Given the 734 Patent's disclosure with respect to "stories," this implied claim construction is not tenable.

Failure to Set Forth "Calculating a Relative Importance of Each Story"

Claim 1 requires "calculating a relative importance of each story in the intersection space," but Corrino's contentions fail to identify where the accused instrumentality performs that function. Indeed, Corrino argues that the search results can be displayed by any number of search orders "such as by price, earliest arrival, earliest departure, etc. ***that can be selected by the user.***" There is no allegation that the accused instrumentality calculates a relative importance of the stories, it merely provides the means for the user to dictate the order of the search results (e.g., by price or departure time).

Failure to Set Forth "An Indication Provided by One or More Users"

Claim 1 of the 734 requires that the stores be filtered "so that each remaining story is associated with *an indication provided by one or more users* that the remaining story is associated with a same one or more participants."

Corrino does not identify an indication provided by one or more users. Corrino states that "as mentioned in the description of the patent, an indicator can be a name or description about the contributor of the story (indicating the contributor of the story). Thus in this case, the names of the airlines or airways listed in the search results are 'indicators.'" Ex. F., Page 10. Even if true (and it is a stretch), the identified "indicators" do not meet the limitation of Claim 1 in that they are not "provided by one or more users."

To be clear, Corrino's claim charts specifically (and repeatedly) identify that the "users" are visitors to the allegedly infringing websites that perform searches on the sites. *See* Ex. F at 1 ("Expedia allows ***users*** to search flights..."), 2 ("Expedia enables ***users*** to enter search query..."), 3 ("the ***user*** searches for flights), 5 ("the search results are displayed to the ***user***,"); 8 ("Expedia provides search

result based on different sort orders ... that can be selected by the *user*...”); 10 (“the identified search results (flights) are displayed to the *user* on the search result page.”) At no point does Corrino state that the identified “indication” is “provided by one or more users” as required by the claim.

Ex. G – U.S. Pat. No. 9,262,533

Limitation of Allegations to Hotels.com and Vrbo Apps

Corrino purports to identify as accused instrumentalities the “websites and mobile apps” for Expedia, Cheaptickets, Hotels.com, Orbitz, Travelocity, trivago, HomeAway and Vrbo; however, Corrino has only charted the Hotels.com and Vrbo applications and none of the websites.

To the extent Corrino seeks to assert infringement by applications other than the Hotels.com and Vrbo applications or any of the websites, Corrino must supplement its contentions to chart the functionality with specificity. If Corrino fails to so supplement its contentions, Defendants will consider the allegations of infringement limited to the charted functionality and will limit its initial production and financial disclosures to the charted instrumentalities. Further Defendants reserve the right to move to strike any supplemental infringement contentions not limited to the disclosures in Corrino’s forthcoming initial infringement contentions.

Failure to Set Forth “The Search Request Including Information Related to the User Device”

The method of Claim 11 of the 533 Patent requires “receiving a search request from a user device via the network, wherein the search request includes information related to the user device.” Corrino’s chart alleges that user of the apps may send a query for hotels in New York or a apartment in Austin by selecting the search button from the device. Corrino further alleges the hotels.com general privacy policy, which is not specifically related to the search functionality, that states that Hotels.com may collect unique device identifiers. However, nothing in the cited privacy policy or in the chart generally evidences that information related to the user device is included as part of the search request.

Failure to Set Forth Interpretation of the Search Request “Using Contexts Published to the Publishing Spaces By Publishers of Different Viewpoints”

The method of Claim 11 requires “processing the search request by identifying a context chain ... wherein the context chain includes *a plurality of contexts that are publishing spaces in which interpretation of the search request takes place by using content published to publishing spaces by publishers of different viewpoints.*” Corrino’s charts fail to set forth each element of this limitation. With respect to Hotels.com, Corrino merely states that the “context chain includes multiple contexts of previous searched [sic] made (previous booking information, last hotel searched etc.) by the user” and states Corrino’s contentions that the claimed “publishers” are property owners that list their

properties on Hotels.com. Ex. G at 4-10. But Corrino does not set forth “a plurality of contexts *that are publishing spaces*,” where in the accused functionality is found the limitation that the interpretation of the search request takes place by using “content published to the publishing spaces by publishers or different viewpoints.” Indeed, Corrino’s Hotels.com chart does not use either the term “publishing spaces” or “viewpoints” at all.

The Vrbo chart includes the same deficiencies. Ex. G. at 19-21.

Failure to Set Forth “Examining Contexts in the Context Chain in a Last-in-First-Out Order”

The method of Claim 11 requires that the processing the search request includes “examining the contexts in the context chain in a last-in-first-out order in which the most recently added contexts to the context chain are examined before earlier added contexts.” Corrino’s charts fail to set forth where in the accused instrumentality this limitation is found. Corrino’s Hotels.com chart cites the Hotels.com cookie policy that states that Hotels.com uses cookies “to remember things like the last hotel you searched for so you can easily find it the next time you visit.” Ex. G at 10. However, even if true, this does not satisfy the claim limitation that a processing a user-search request includes examining contexts in the context chain in a last-in-first-out order in which the most recently added contexts are examined before earlier contexts. Corrino does not identify what the context chain is, how the contexts are examined, the order in which contexts are examined, or even include screen shots of a search request in which “the last hotel searched” is identified as part of the search results.

The Vrbo chart includes the same deficiencies. Ex. G. at 21-23.

* * * *

As the Federal Circuit has observed, “[a] patent suit can be an expensive proposition. Defending against baseless claims of infringement subjects the alleged infringer to undue costs – precisely the scenario Rule 11 contemplates.” *View Eng’g, Inc. v. Robotic Vision Sys., Inc.*, 208 F.3d 981, 986 (Fed. Cir. 2000). In the patent context, Rule 11(b)(2)’s requirement that all legal arguments be nonfrivolous also applies to claim construction positions. *See Antonious v. Spalding & Evenflo Cos.*, 275 F.3d 1066, 1072 (Fed. Cir. 2002). Rule 11 also requires an attorney to compare the accused instrumentality with the construed patent claims on an element-by-element basis before filing suit. *Id.* at 1073-74; *View Eng’g*, 208 F.2d at 986; *Q-Pharma, Inc. v. Andrew Jergens Co.*, 360 F.3d 1295, 1300 (Fed. Cir. 2004).

Based on our review of Corrino’s initial contentions, it is clear that neither Corrino nor its counsel performed the required objective investigation before filing this suit. To the extent that Corrino, following a reasonable investigation, is unable to point to functionality in the accused devices which satisfy the each limitation of each asserted claim of each Asserted Patents, Defendants expect Corrino to withdraw the claims of infringement.



Cecil E. Key
June 23, 2021
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We expect Corrino to serve fulsome infringement contentions against Expedia, Inc. and trivago N.V. which will, at minimum, remedy the aforementioned deficiencies and/or affirmatively withdraw any assertion of infringement with respect to any claim for which no good faith basis exists to assert that the accused instrumentalities satisfy each limitation of the claim.

Given the date of the deemed Case Management Conference of July 7, 2021, Corrino's initial infringement contentions against Expedia, Inc. and trivago N.V. are due **June 30, 2021**. *See* Dkt. 32, Amended Standing Order; Court Order Governing Proceedings. If Corrino needs additional time in order to prepare fulsome infringement contentions, please let us know. We would be willing to agree to an alternate date for Corrino's infringement contentions provided that Defendants' deadline for invalidity contentions is similarly adjusted.

Please feel free to contact me if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jeffrey J. Catalano". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jeffrey J. Catalano

CC: Counsel of Record